December 28, 2001 - January 3, 2002

The Terra spacecraft is in nominal mode.  All instruments are in nominal science mode.

Network problems resulted in the decision to activate the backup EOS Operations Center in Building 14 at NASA GSFC to begin handling real-time Terra passes beginning in the afternoon of January 3, 2002. An intermittent router problem made the Terra command lines from Building 32 suspect.  Operations will remain at the back-up facility until this problem is understood.  An anomaly team has been formed. If this problem continues an incident report will be generated.

NASA GSFC contamination experts met on January 2, 2002, to discuss issues related to the potential for contamination and solar impingement involving the MODIS instrument in preparation for the next Inclination Adjust Maneuver for Terra, currently scheduled for January 16, 2002. The MODIS Nadir aperture Door (NAD) was manually closed for the first Inclination Maneuver, to mitigate the risk of contamination from the Terra thrusters. Since contamination and solar impingement risk both appear minimal, MODIS plans to leave the NAD open for the next maneuver to avoid the risk of recurring issues with the micro-switch that caused a false reading on the NAD closure status telemetry during the prep for the first maneuver.  The next maneuver will allow automatic door closure via stored commands in the unlikely event that the maneuver does not execute properly.  These commands can then be inhibited upon successful completion of the maneuver.  This is viewed as a very safe approach, as the safe hold condition that would result from non-nominal maneuver execution would automatically close the MODIS doors.

A calibration roll maneuver for the MODIS instrument involving a small roll of approximately -2 degrees was successfully executed on January 3, 2002.

The decision was announced to recommend postponement of the Deep Space Calibration Maneuver for Terra until such time as Aqua was launched and running smoothly, and operations within the EOS Operations Center (EOC) had become stable in a multi-mission mode.

Several MDA2BITE trips (High Gain Antenna Motor Drive Assembly opto-coupler Single Event Upsets) occurred during this reporting period, with no resultant non-recoverable data loss.

Terra Plans:
<ul>
<li>Planning for next Drag Make-up and Inclination Adjust Maneuvers;
<li>Commercial Ground Site Validation will continue once the DataLynx antenna is declared operational;
<li>Continued planning for ASTER Direct Downlink (DDL) demonstrations over Polar Ground Stations; and
<li>Continued planning for additional Polar Ground Station Science Data Downlink proficiency demonstrations
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